Of the Inequality of natural Time, and of the right adjusting and managing of Pendulum Clocks *and* Watches.

THE Day is of two Sorts, *Mean* and *Solar*; the Mean or equal Day is always 24 Hours exactly, and is the Day which all good Pendulum Clocks and Watches should exactly measure. The Solar, apparent, or natural Day, is pointed out by a good Sun Dial; or is that Space of Time that intervenes between the Sun's leaving a given Meridian in the Heavens, and returning to it again; and does almost perpetually differ from the Mean or equal Day; as consequently a good Pendulum Clock, accurately adjusted, will almost perpetually differ from an exact Sun-Dial. In the preceding Table, you have the Quantity of this Difference in Minutes, for every Day in the Year; with the Titles Add. or Sub. which signifies thus much: If you can gain the exact apparent Time of the Day, either by the Sun's Rising, Setting, transiting the Meridian, or by a good Sun-Dial, and would set your Clock or Watch to go with the exact equal Time, as it always should do; then, in this Table, find the Number of Minutes standing against the Day of the Month propos'd, and observe the Title above, if Add. or Sub. for according to the Title you must apply the said Minutes to the apparent Time, and the Sum or Difference will be the exact equal Time required; to which you must set your Clock or Watch.

Example I.

Suppose *February* 5, I observe by a good Sun-dial when it is exactly 10 a Clock; then against the 5th of *February*, in this Table, I find 15 min. Add. which makes 10 Hours 15 Minutes, the exact equal Time, which should be shown by the Clock at the same Time the Dial shows exactly 10 Hours.

Example II.

On the 15th Day of *October*, Suppose I observe by a good Dial, when it is exactly 1 a Clock in the Afternoon; in this Table, against the 15th of *October*, stand 16 min. Sub. which leaves 44 Minutes after 12 for the Time to be shown by your Clock.

Note, When the Title is Add. then Clocks or Watches go too fast; but when the Title is Sub. then Clocks or Watches go too slow.

READING, Writing, Arithmetick, Merchants Accompts, Geometry, Algebra, Surveying, Gauging, Navigation, Astronomy, and all other mathematical Sciences, are taught by

THEOPHILUS GREW, in *Philadelphia*.

Supreme COURTS *in* Pennsylvania, *are held*,

AT *Philadelphia*, the tenth Day of *April*, and the twenty-fourth Day of *September*.

Courts of Quarter Sessions, are held,

AT *Philadelphia*, the 1st Monday in *March*, *June*, *September* and *December*. At *Newtown*, for *Bucks* County, on the 11th Day following (inclusive) in every of the Months aforesaid. At *Chester*, the last Tuesday in *May*, *August*, *November* and *February*. At *Lancaster*, the 1st Tuesday in each. At York, the last Tuesday in April, July, October and January. At Cumberland, the Tuesdays preceding York Courts.

Courts of Common Pleas, are held,

AT *Philadelphia*, the 1st Wednesday after the Quarter-Sessions in *March*, *June*, *Sept.* and *Decem.* At *Newtown*, the 9th Day following (inclusive) in every of the Months aforesaid. At *Chester*, the last Tuesday in *May*, *August*, *Novem.* and *Febr.* At *Lancaster*, the 1st Tuesd. in the Months aforesaid. At *Sussex*, the 1st, at *Kent*, the 2d, and at *Newcastle*, the 3d Tuesday in the same Months.

Mayor's Courts in Philadelphia, *are held*,

THE first Tuesday in *January*, *April*, *July*, and the last Tuesday in *October*.

Supreme Courts in New-Jersey, *are held*,

AT *Amboy*, the 3d tuesday in *March*, and the 2d tuesday in *August*. At *Burlington*, the 2d tuesday in *May*, and the 1st tuesday in *November*.

Courts for Tryal of Causes brought to issue in the Supreme Court, are held,

FOR *Salem* and *Cape May* Counties the 3d, for *Gloucester* the 4th tuesday in *April*. For *Hunterdon*, the 1st tuesday in *May*. For *Somerset* the 2d, For *Bergen* the 4th tuesday in *October*. For *Essex*, the next tuesd. following. For *Monmouth*, the next tuesday after that.

General Sessions and County Courts, are held,

IN *Bergen* County, the 1st tuesday in *January* and *October*, and the 2d tuesday in *June*. In *Essex* the 2d tuesday in *January* and *May*, the 3d tuesday in *June*, and 4th in *September*. In *Middlesex* the 3d tuesdays in *January*, *April* and *July*, and the 2d tuesday in *October*. In *Somerset*, the first tuesdays in *January*, *April* and *October*, and the 2d tuesdays in *June*. In